



Docket No.: 34650-00179USC2
(PATENT)

ZFW
AP

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Karl H. Torbjorn, Gardenfors et al.

Application No.: 10/626025

Group Art Unit: 2635

Filed: July 24, 2003

Examiner: B. A. Zimmerman

For: RADIO TRANSCEIVER ON A CHIP

TRANSMITTAL LETTER

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: March 7, 2005

Signature:

(Linda Lee Andujar)

Dear Sir:

Enclosed are the following items for filing in connection with the above-referenced Patent Application:

1. Information Disclosure Statement (1 page) and
2. IDS (Citation) by Applicant (42 References) (2 pages).

Please charge our Deposit Account No. 10-0447 in the amount of \$180.00 covering the required fees. The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 10-0447, under Order No. 34650-00179USC2. A duplicate copy of this paper is enclosed.

Dated: March 7, 2005

Respectfully submitted

By
Ross T. Robinson

Registration No.: 47,031
JENKENS & GILCHRIST, A PROFESSIONAL
CORPORATION
1445 Ross Avenue, Suite 3200
Dallas, Texas 75202
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Attorneys For Applicant



Under the Paperwork Reduction Act of 1995, no person are required to respond to a collection of information unless it displays a valid OMB control number.

Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL

For FY 2005

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 180.00)

Complete if Known	
Application Number	10/626025-Conf. #1268
Filing Date	July 24, 2003
First Named Inventor	Karl H. Torbjorn, Gardenfors
Examiner Name	B. A. Zimmerman
Art Unit	2635
Attorney Docket No.	34650-00179USC2

METHOD OF PAYMENT (check all that apply)

Check Credit Card Money Order None Other (please identify): _____
 Deposit Account Deposit Account Number: 10-0447 Deposit Account Name: Jenkins & Gilchrist, a Professional

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee
 Charge any additional fee(s) or underpayment of Credit any overpayments
 fee(s) under 37 CFR 1.16 and 1.17

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description

Each claim over 20 (including Reissues)

Small Entity Fee (\$)	Fee (\$)
50	25

Each independent claim over 3 (including Reissues)

200	100
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Multiple dependent claims

360	180
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Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
_____	- =	_____ x _____	= _____

Multiple Dependent Claims	
Fee (\$)	Fee Paid (\$)
_____	_____

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)
_____	- =	_____ x _____	= _____

Multiple Dependent Claims	
Fee (\$)	Fee Paid (\$)
_____	_____

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____	- 100 =	/50 _____ (round up to a whole number) x _____	=	Fee Paid (\$)

4. OTHER FEE(S)

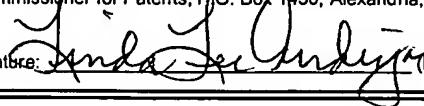
Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): 1806 Submission of an Information Disclosure Statement 180.00

SUBMITTED BY		Signature	Registration No. (Attorney/Agent)	47,031	Telephone	(214) 965-7300
Name (Print/Type)		Ross T. Robinson			Date	March 7, 2005

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Dated: March 7, 2005

Signature:  (Linda Lee Andujar)



CUSTOMER NO. 23932

Docket No.: 34650-00179USC2
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Karl H. Torbjorn, Gardenfors et al.

Application No.: 10/626025

Confirmation No.: 1268

Filed: July 24, 2003

Art Unit: 2635

For: **RADIO TRANSCEIVER ON A CHIP**

Examiner: B. A. Zimmerman

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

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Dated: March 7, 2005

Signature:

(Linda Lee Andujar)

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

A copy of each reference on the PTO/SB/08 is attached.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing

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of this Information Disclosure statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

Please charge our Deposit Account No. 10-0447 in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 10-0447, under Order No. 34650-00179USC2. A duplicate copy of this paper is enclosed.

Dated: March 7, 2005

Respectfully submitted,

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Ross T. Robinson

Registration No.: 47,031
JENKENS & GILCHRIST, A PROFESSIONAL
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1445 Ross Avenue, Suite 3200
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(214) 855-4500
Attorneys For Applicant



Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

				Complete If Known	
Application Number	10/626025-Conf. #1268				
Filing Date	July 24, 2003				
First Named Inventor	Karl H. Torbjorn, Gardenfors				
Art Unit	2635				
Examiner Name	B. A. Zimmerman				
Sheet	1	of	2	Attorney Docket Number	34650-00179USC2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document
A1	US-2002/0094037	07-18-2002	Darabi et al.	
A2	US-5,937,341	08-10-1999	Suominen	
A3	US-6,427,068	07-30-2002	Suominen	
A4	US-6,631,256	10-07-2003	Suominen	
A5	US-2004/0038655	02-26-2004	Suominen	
A6	US-4,944,025	07-24-1990	Gehring et al.	
A7	US-5,003,621	03-26-1991	Gailus	
A8	US-4,653,117	03-24-1987	Heck	
A9	US-5,222,144	06-22-1993	Whikehart	
A10	US-4,852,123	07-25-1989	Bickley et al.	
A11	US-4,464,770	08-07-1984	Maurer et al.	
A12	US-5,640,698	06-17-1997	Shen et al.	
A13	US-5,850,598	12-15-1998	Behrent	
A14	US-6,226,509	05-01-2001	Mole et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T ⁶
B1	-JP A 07-254865	10-03-1995	Toshiba Corp.		Abstract
B2	-EP 0 742 647 A1	11-13-1996	Matsushita Electric		
B3	-WO 94/10757	05-11-1994	Data-Radio Engineering & Consulting GmbH		
B4	-WO 97/08842	03-06-1997	Pacific Communications Sciences, Inc.		
B5	-WO 98/08300	02-26-1998	Advanced Micro Devices, Inc.		
B6	-EP 0 797 292 A1	09-24-1997	Philips Electronics N.V.		
B7	-EP 1 058 396 A1	12-06-2000	Motorola, Inc.		
B8	-WO96/17441	06-06-1996	Matsushita Electric Industrial Col, Ltd.		Abstract

*EXAMINER: Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
C1	Hooman Darabi et al., "A 2.4-GHz CMOS Transceiver for Bluetooth", IEEE Journal of Solid-State Circuits, Vol. 36, No. 12, December 2001		
C2	D.M. Bakkert et al. "Bluetooth End to End", M&T Books, an imprint of Hungry Mind, Hungry Minds, Inc., ISBN: 0-7645-4887-5, 7 pages		
C3	DAVID BLANKENBECKLER, "An Introduction to Bluetooth" ThinkBurst Media, Inc. www.wirelessdevnet.com/channels/bluetooth/features/bluetooth.html , pp. 1-7		
C4	ING. ZDENEK MIKESKA, "Parameters of Bluetooth receiver and transmitter", January 2, 2004, Institute of Electrical Engineering and Communication, Brno University of Technology, Czech Republic, pp. 1-9		

Examiner Signature	Date Considered
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Substitute for form 1449/PTO				Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	10/626025-Conf. #1268
<i>(Use as many sheets as necessary)</i>				Filing Date	July 24, 2003
				First Named Inventor	Karl H. Torbjorn, Gardenfors
				Art Unit	2635
				Examiner Name	B. A. Zimmerman
Sheet	2	of	2	Attorney Docket Number	34650-00179USC2

C5	BROADCOM "BCM2002X 2.4GHz Bluetooth Frac-N-Radio" Product Brief	
C6	PIETRO ANDREANI et al. "A CMOS gm-C IF Filter for Bluetooth", in Proceedings of CICC 2000, paper 18-6, May 2000, 4 pages	
C7	JAN CROLS et al., "A Single-Chip 900 MHz CMOS Receiver Front-End with a High Performance Low-IF Topology", IEEE Journal of Solid-State Circuits, Vol. 30, No. 12, December 1995, Katholieke Universiteit Leuven, Heverlee, Belgium	
C8	ASAD A. ABIDI, "Direct-Conversion Radio Transceivers for Digital Communications," IEEE Journal of Solid-State Circuits, Vol. 30, No. 12, December 1995, Katholieke Universiteit Leuven, Heverlee, Belgium, pp. 1390-1411	
C9	M. STEYAERT, "A 1-GHz Single-Chip Quadrature Modulator", IEEE Journal of Solid-State Circuits, Vol. 27, No. 8, August 1992, pps. 1194-1197	
C10	JACK P.F. GLAS, "Digital I/Q Imbalance Compensation in a Low-IF Receiver" IEEE Globecom, pp 1461-1466, Nov. 1998	
C11	VITO BOCCUZZI et al., "Testing the Double Low-IF Receiver Architecture" Proceedings of the CICC, IEEE, 1997, pp. 521-524	
C12	VALKAMA et al., "BSS Based I/Q Imbalance Compensation in Communication Receivers in the Presence of Symbol Timing Errors", Proc. Second Int. Workshop Independent Component Analysis Blind Signal Separation, Helsinki, Finland, June 2000, pp. 393-398.	
C13	J. SEVENHANS et al., "An Analog Radio Front-end Chip Set for a 1.9 GHz Mobile Radio Telephone Application" 1994 IEEE International Solid-State Circuits Conference, February 16, 1994	
C14	J.O. VOORMAN "Continuous-time analog integrated filters" Integrated Continuous-Time Filters, New York IEEE Press, 1993	
C15	JAN CROLS et al., "An Analog Integrated Polyphase Filter for a High Performance Low-IF Receiver", 1995 Symposium on VLSI Circuits Digest of Technical Papers, Katholieke Universiteit Leuven, Heverlee, Belgium	
C16	M.J. GINGELL, "Single Sideband Modulation using Sequence Asymmetric Polyphase Networks" Electrical Communication - Volume 48, Number 1 and 2 - 1973	
C17	STEPHEN A. JANTZI, "A Fourth-Order Bandpass Sigma-Delta Modulator", IEEE Journal of Solid-State Circuits, Vol. 28, No. 3, March 1993	
C18	JAN CROLS et al., "A 1.5 GHz Highly Linear CMOS Downconversion Mixer" IEEE Journal of Solid-State Circuits, Vol 30, No. 7, July 1993	
C19	TRUDY D. STETZLER ET AL., "A 2.7-4.5 V Single Chip GSM Transceiver RF Integrated Circuit, IEEE Journal of Solid-State Circuits, Vol. 30, No. 12, December 1995	
C20	FLOYD M. GARDNER, "Phaselock Techniques, "Phaselock Receivers and Transponders" ISBN: 0-471-04294-3, April 1979	

*EXAMINER: Initial if information considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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